



Use this checklist to install and test the Routermate 56K/64K CSU/DSU. For additional information, see the *Routermate 56K/64K CSU/DSU Installation and Operation Manual* (918-6268). If you have any questions during installation, contact Osicom Technologies Customer Service at (800) 359-2273.

☐ **Installation Checklist**

1. Prepare the site, including provision of a dedicated power outlet.
2. Verify that common carrier or customer-supplied DDS line is installed. When ordering a line, specify to the carrier the desired line type and speed. The Routermate 56/64 can be used on a 56000 bps or 64000 bps DDS clear channel line.
3. Obtain the console and DTE (V.35) cables from your terminal vendor or router supplier. The console cable should be a straight-through cable. The DTE cable is a standard V.35 data cable. See Appendix A, Interfaces and Cables and Appendix B, Ordering Information.
4. Obtain an IP address from your network administrator or Internet services provider.

☐ **Power Up**

Connect the wall-mount transformer to the rear-panel power connector, then plug into a grounded AC power receptacle. The **NIS** LED will light since you are not yet connected to the network.

☐ **Connect Terminal**

1. Use a straight-through RS-232 cable to connect a terminal to the **CONSOLE** port on the front of the router. Power-on the terminal and configure the terminal as follows:
 - Rate: 9600 bps
 - Mode: full duplex
 - Character: 8 bits
 - Parity: none
 - Stop bits: 1
 - Flow control: DC1/DC3 (Xon/Xoff)
 - CR = CR
2. Upon initial start-up, the Terminal Selection screen appears. Select the type of terminal you are using; the password prompt appears.
3. Type **[CR]**, the default password, to access the management screens. The Main Menu is displayed.

☐ **Configure CSU**

The default settings for the CSU are suitable for most applications. See the [Configuration Menu](#) in Chapter 3 of the manual for additional information.

Access the Configuration screen and configure the following parameters:

Mode - 56000 (default)

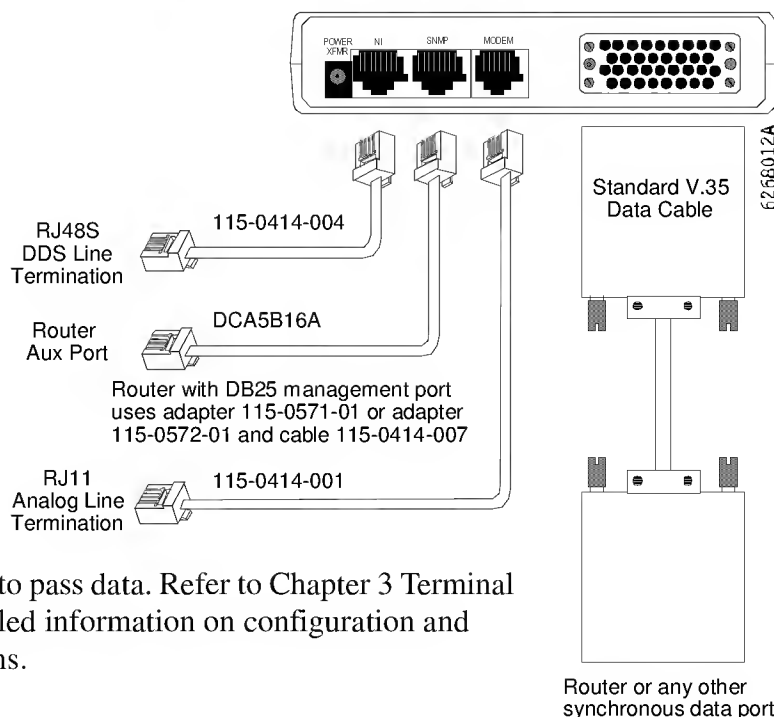
Timing - Repeater (default)

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☐ Attach Cables

Attach cables as illustrated and described below.

1. Use cable 115-0414-004 to connect the **NI** interface to the DDS network.
2. Use cable 115-0414-001 to connect the **MODEM** interface to the RJ11 termination.
3. Connect the DTE interface to the router or terminal server's V.35 port using a standard V.35 data cable.
4. For dial-in management of an external device connected to the Routermate's **CONSOLE** interface, connect the **SNMP** interface to the device's AUX port.



You are now ready to pass data. Refer to Chapter 3 Terminal Operation for detailed information on configuration and management screens.

☐ Test CSU

After all the cables are connected and you have completed the initial software configuration, the Routermate should be able to communicate with the DDS network. Verify this as follows:

1. At the Main Menu, select Diagnostics.
2. At the Diagnostics screen, check the **Line Status** field. One or more of the following conditions can appear, depending on the current operating mode.

Control Mode Idle - The Routermate is receiving Control Mode Idle from the network.

Data Mode - The Routermate is receiving user's data from the remote unit.

Loss of Signal - No inbound signal is detected (32 cycles of all zeros will trigger this message).

OOS * - The Routermate is receiving the Out of Service signal from the Telco.

OOF * - The Routermate is receiving the Out of Frame signal from the Telco.

Data Mode Idle (Clear Channel only) - The Routermate is receiving carrier from the remote end.

CSU Loop * - This is a test initiated by the Telco at the user's request. A polarity reversal of the sealing current on the Telco line causes a loopback through the CSU section of the unit.

DSU Loop * - This is a test initiated by the Telco at your request. An inband test pattern sent by the Telco causes a loopback similar to the Digital Loop to occur.

Data Mode Idle (Clear Channel only) - The Routermate is receiving carrier from the remote end.

Note ** These status conditions only occur on the DDS line; not when the Routermate is used as an LDM.*

The Line Status field should indicate **Control Mode Idle** or **Data Mode**.

If the Line Status field displays *OOS* or *OOF*, it indicates a network problem.

If the Line Status field displays Loss of Signal, perform a Local Loop test to verify correct operation of the Routermate 56/64.

When the Local Loop test is set, the Line Status field should indicate Data Mode. If the Line Status field does not display

Data Mode when Local Loop is set, it indicates a problem with the unit.

If the Line Status field displays Data Mode when Local Loop is set, but indicates Loss of Signal when the test is cleared, it indicates a problem with the network or an open NI cable.

See [Diagnostics](#) in the manual (Chapter 3) for additional information.

☐ **SNMP and Telnet**

If SNMP or Telnet are used to manage the Routermate, access the Management Menu and configure the following parameters:

- **Internet Address** - before SNMP or Telnet management can be used, assign an Internet Protocol (IP) Address to the Routermate.
- **IP Subnet Mask** - enter the same subnet mask as the router or terminal server to which the Routermate is attached.
- **Access via telnet** - before Telnet management can be used, set this option to Enabled (default).
- **Community Strings** - before SNMP management can be used, configure the community strings to match the strings used by the SNMP management station.

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☐ Dial-in Management

The optional integral V.32 modem provides secure dial-in management of the following:

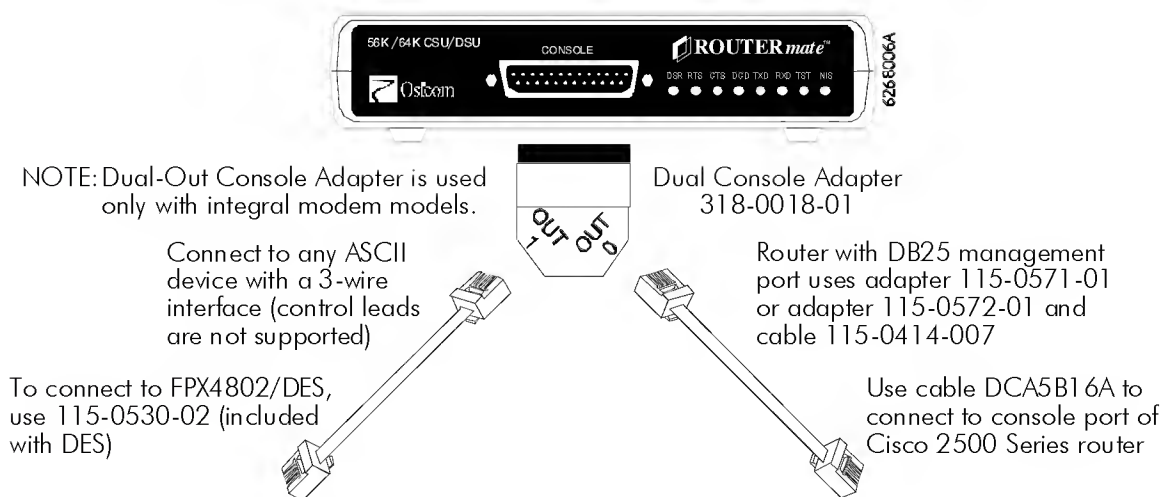
- Routermate management screens.
- An external device (usually a router) connected to the **OUT 0** port on the console adapter.
- Management screens for an optional FPX4802/DES Frame Relay Encryptor or other ASCII device with a 3-wire interface connected to the **OUT 1** port on the console adapter.

Dial-in management calls can be made from a remote modem when the primary link is up or down.

A modem security code can be exchanged during the handshake sequence between the integral modem and the remote modem. If this feature is to be used, the remote modem must be an Osicom DCM4232 or DCM4532 (see Step 4 below).

Before making a dial-in management call:

1. Connect cable 115-0414-001 from the **MODEM** interface to the DDD service RJ11 jack.
2. Connect the dial-in management cables as shown below.



3. Ensure that the following parameters are set as required (the default settings can be used).

At the **Unit** screen:

Console Password (default: [CR])

At the **Dial-In Management Options** screen:

Auto Answer (default: Enabled)

Modem Security (default: Disabled)

Dial-In Password (default: [CR])

4. If the remote modem is a DCM4232 or DCM4532 and you want to use the **Modem Security Code**, perform this step; otherwise, skip to Step 5.
 - a. At the Dial-In Management Options screen, configure the integral modem as follows:
 - i. Set **Modem Security** to *Enabled*.

- ii. Configure the integral modem's **Modem Security Code**. It must match the passwords of the remote DCM4232 or DCM4532 modem.
 - b. Configure the remote DCM4232 or DCM4532 used to originate the call:
 - i. The DCM4232 and DCM4532 use two passwords (active and pending). Set both passwords to match the integral modem's **Modem Security Code**.
Enter:AT"Zpassword (active password)
AT"Ypassword (pending password)
 - ii. Set the DCM4232 or DCM4532 modem user ID to *usr* in order to connect to the Routermate with security.
Enter:AT"Wusr.
5. Place a call from the remote modem to the Routermate. If no Dial-In password has been configured, the terminal selection screen and Dial-in password prompt are bypassed.

After the connection is made, the Routermate's Device Selection Menu displays:

```
0 - Aux Port 0: Device 0 [device connected to OUT 0]
1 - Aux Port 1: Device 1 [device connected to OUT 1]
2 - 56/64 CSU/DSU
L - Logoff
```

Note *If a Dial-in password has been configured, and the **Terminal Type Select** option is set to **Enabled**, you are prompted to select a terminal type and then enter the configured password before the Device Selection Menu is displayed (see [Unit Menu](#) in Chapter 3).*

6. Select **2 - 56/64 CSU/DSU**.
You are prompted to enter a password.
7. If no Console Password has been configured, press **[CR]** at the password prompt.
If a password has been configured, enter the **Console Password**.
After the password is successfully entered, the Routermate's Main Menu is displayed.

A dial-in management call locks out a local terminal connected to the Routermate's **CONSOLE** interface. The local terminal displays the message:

Local Terminal Locked

Management Call

In Progress

Please wait until call disconnects.....

Select **Logoff** at the Device Selection Menu to disconnect the management call.

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☐ Alarm Call

The Routermate's Alarm Call feature allows the user to enable and to limit the use of the integral modem to send alarm notifications to an ASCII device attached to a remote modem.

On the Alarm Call Options screen, set **Alarm Call Operation** to Enabled. The modem will dial out if the CSU detects a change in the NI alarm conditions.

When the Routermate first powers on and its NI interface is not connected to anything, an alarm notification is generated in the first call, and looks something like:

```
FROM: <unit ID text>  AT: <unit's phone number>  
  00.00:00:10.51  NI - No Signal  
END
```

See the [Alarm Call Options](#) screen in Chapter 3 for more information.